



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,838	03/04/2004	Johan Henric Robert Blix	ANO 6460 US/5135	3863

27624 7590 08/06/2008
AKZO NOBEL INC.
LEGAL & IP
120 WHITE PLAINS ROAD, SUITE 300
TARRYTOWN, NY 10591

EXAMINER

GILBERT, WILLIAM V

ART UNIT	PAPER NUMBER
----------	--------------

3635

MAIL DATE	DELIVERY MODE
-----------	---------------

08/06/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/791,838	Applicant(s) BLIX ET AL.	
	Examiner William V. Gilbert	Art Unit 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a first action following a Request for Continued Examination. Claims 1-22 are pending.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19 May 2008 has been entered.

Claim Objections

2. **Claims 1 and 15** are objected to because of the following informalities: the claims as amended include a "locking unit...with coupling parts..." (e.g., claim 1, lines 3 and 4.) Applicant's disclosure defines the coupling parts as a tongue and groove (specification: page 2, lines 5-15.) As amended, the claims appear to claim a tongue and groove in addition to "coupling parts" (see, e.g., claim 1, lines 1-4,) not that the tongue and groove are the coupling parts. The examiner

Art Unit: 3635

interpreted that the applicant intended that the coupling parts be in addition to the tongue and groove, but applicant should amend the claim to reflect the intent of the limitation. Appropriate correction is required.

Claims 1, 15 and 18 are objected to because of the following informalities: applicant claims the limitation "less than about 6 weight %" (e.g., claim 1, line 8.) The limitation "less than about" is vague to the examiner in that the limitation "less than" is interpreted as the weight percent can **not** be greater than 6%, but the limitation "about" is interpreted that values approximate to 6% (including greater than 6%) are permitted. Applicant should clarify this limitation. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 9-11, 13, 14 and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kettler et al. (U.S. Publication 2002/0083673) in view of Morita et al. (U.S. Patent No. 4,943,612).

Regarding Claim 1, Kettler discloses a wood panel (Page 2, paragraph 0026) with a tongue and groove configuration (Figure 1) and coupling parts (24, 26) along the edges of two opposite sides of the panel forming an interlocking unit (while the figures show two separate panels connected in a tongue and groove profile, the disclosure notes that each panel has both a tongue and groove profile; paragraph 0001, lines 1-5.) Kettler does not disclose coating the tongue or groove with a polymer film with a Tg higher than about -15 degrees C. Morita discloses a polymer film (Column 3, lines 61, 62) having a Tg higher than -15 degrees C (Column 3, line 57). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to coat the tongue or groove of the panel in Kettler with the polymer in Morita because Morita teaches this polymer is used with wood products as an adhesive (column 14, lines 9-14, or other coating per column 9, lines 35-45), and it is well known in the art to use adhesives and coatings with wood products.

Kettler in view of Morita further fails to disclose the percent of the moisture content as claimed. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have these limitations because Applicant failed to state a criticality for having these limitations and it is inherent the claimed invention has a moisture content. Further, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have the limitation of the moisture content because differences in concentration will not support patentability of subject matter encompassed by the prior art unless there is evidence indicating such a limitation is critical. See M.P.E.P. §2144.05 "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454 (CCPA 1955) (Claimed process which was performed at a temperature between 40C and 80C and an acid concentration between 25% and 70% was held to be *prima facie* obvious over a reference process which differed from the claims only in that the reference process was performed at a temperature of 100C and an acid concentration 10%.)

Art Unit: 3635

Regarding Claims 2 and 3, Kettler in view of Morita discloses the Tg is, per Claim 2, between -10 to 65 degrees C and, per Claim 3, 0 to 40 degrees C. Column 3, line 57.

Regarding Claims 4-6, Kettler in view of Morita does not disclose, per Claim 4, a moisture content less than 2 weight percent based on the solids content; per Claim 5, a pendulum hardness from 10 to 160 pendulum; and per Claim 6 a pendulum hardness of 20 to 120 pendulums. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have these limitations because Applicant failed to state a criticality for having these limitations and it is inherent the claimed invention has a moisture content and pendulum hardness. Further, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have the limitation of the moisture content because differences in concentration will not support patentability of subject matter encompassed by the prior art unless there is evidence indicating such a limitation is critical. See M.P.E.P. §2144.05 "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454 (CCPA 1955) (Claimed process which was performed at a

Art Unit: 3635

temperature between 40C and 80C and an acid concentration between 25% and 70% was held to be *prima facie* obvious over a reference process which differed from the claims only in that the reference process was performed at a temperature of 100C and an acid concentration 10%.)

Regarding Claim 7, Kettler in view of Morita discloses an ethylenically unsaturated monomer (Column 8, lines 4-12).

Regarding Claim 9, Kettler in view of Morita discloses a plasticizer (Column 3, line 59).

Regarding Claim 10, Kettler in view of Morita discloses the polymer solution comprising polyvinyl alcohol (Column 11, line 53).

Regarding Claim 11, Kettler in view of Morita discloses the polymer solution comprises surfactants (Column 11, line 3).

Regarding Claim 13, Kettler in view of Morita disclose the claimed invention except for the limitation of the plasticizer in the range of 0 to 10 percent weight based on the dry solids and a second polymer film having a plasticizer less than 15 percent weight based on the dry solids. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to use these limitations because Applicant failed to state a criticality for having these limitations and the prior art of

record is capable of being made in with these limitations.
Further, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have this limitation because differences in concentration will not support patentability of subject matter encompassed by the prior art unless there is evidence indicating such a limitation is critical. See M.P.E.P. §2144.05 "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454 (CCPA 1955) (Claimed process which was performed at a temperature between 40C and 80C and an acid concentration between 25% and 70% was held to be *prima facie* obvious over a reference process which differed from the claims only in that the reference process was performed at a temperature of 100C and an acid concentration 10%.)

Regarding Claim 14, Kettler in view of Morita discloses the tongues and grooves are wood-based (Kettler paragraph 0026).

Regarding Claim 16, Kettler in view of Morita discloses a floor covering according to Claim 1 (Kettler paragraph 0003).

Regarding Claim 17, the parquet board in Kettler is capable of being used as a wall covering.

Regarding Claim 18, Kettler discloses providing an interlocking unit with a tongue and groove (see Fig. 1,

Art Unit: 3635

generally; see also paragraph 0001, lines 1-5 where a tongue and groove are on each panel) with locking means (24, 28), but it does not disclose applying a polymer solution to the panel where the polymer film has a glass transition temperature higher than about -15 degrees Celsius. Morita discloses a polymer film (Col. 3, lines 61-62) having a Tg higher than -15 degrees C (col. 3, line 57.) It would have been obvious at the time the invention was made to a person having ordinary skill in the art to coat the tongue or groove of the panel in Kettler with the polymer in Morita because Morita teaches this polymer is used with wood products (col. 14, lines 9-14; col. 9, lines 35-45,) which would be well within the level of skill in the art.

Kettler in view of Morita further fails to disclose the percent of the moisture content as claimed. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have these limitations because Applicant failed to state a criticality for having these limitations and it is inherent the claimed invention has a moisture content. Further, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have this limitation because differences in concentration will not support patentability of subject matter encompassed by the prior art unless there is

evidence indicating such a limitation is critical. See M.P.E.P. §2144.05 "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454 (CCPA 1955) (Claimed process which was performed at a temperature between 40C and 80C and an acid concentration between 25% and 70% was held to be *prima facie* obvious over a reference process which differed from the claims only in that the reference process was performed at a temperature of 100C and an acid concentration 10%.)

Regarding Claim 19, Kettler in view of Morita discloses the Tg is between -10 to 65 degrees C (Column 3, line 57).

Regarding Claim 20, Kettler in view of Morita discloses an ethylenically unsaturated monomer (Kettler, Column 8, lines 5-12) and at least one plasticizer (Column 3, line 59).

Regarding Claim 21, Kettler in view of Morita discloses a floor covering according to Claim 7 (Kettler paragraph 0003).

Regarding Claim 22, the parquet board in Kettler is capable of being used as a wall covering.

Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kettler and Morita, further in view of Lelli et al. (U.S. Patent No. 6,617,386).

Regarding Claim 8, Kettler in view of Morita discloses the claimed invention except for the use of polyvinyl acetate. Lelli discloses a finish employing polyvinyl acetate. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to add polyvinyl acetate to the mixture in Morita because polyvinyl acetate aids in the adhesion of the mixture to the panel.

Regarding Claim 15, Kettler discloses an interlocking unit (Figure 1) with tongues and grooves and coupling parts (24, 26) along the edges of two opposite sides of the panel forming an interlocking unit (while the figures show two separate panels connected in a tongue and groove profile, the disclosure notes that each panel has both a tongue and groove profile; paragraph 0001, lines 1-5.) Kettler does not disclose a polymeric coating. Morita discloses a polymeric film (Column 3, lines 61-63) having a Tg between -10 to 65 degrees C (Column 3, line 57) and a plasticizer (Column 3, line 59). Morita does not disclose using polyvinyl acetate in the film. Lelli discloses a finish with polyvinyl acetate. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to add the film in Morita to the wood in Kettler because Morita teaches that the material can be used on wood (Column 124, lines 9-15). Further adding the polyvinyl acetate in Lelli

Art Unit: 3635

to the material in Morita is obvious because it would help in the adhesion properties of the material in Morita.

Further, the prior art fails to disclose the percent of the moisture content as claimed. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of design choice to have these limitations because Applicant failed to state a criticality for having these limitations and it is inherent the claimed invention has a moisture content. Further, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have this limitation because differences in concentration will not support patentability of subject matter encompassed by the prior art unless there is evidence indicating such a limitation is critical. See M.P.E.P. §2144.05 "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454 (CCPA 1955) (Claimed process which was performed at a temperature between 40C and 80C and an acid concentration between 25% and 70% was held to be *prima facie* obvious over a reference process which differed from the claims only in that the reference process was performed at a temperature of 100C and an acid concentration 10%.)

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kettler and Morita, further in view of Rockrath et al (U.S. Patent No. 6,410,646).

Regarding Claim 12, Kettler in view of Morita discloses the claimed invention except for the addition of etherified amino resin. Rockrath discloses a coating having ethylenically unsaturated monomers (Column 6, lines 62-63) and employing etherified amino resin (Column 8, lines 29-31). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use this resin in the mixture in Morita because Rockrath teaches that it is well known in the art to add such a composition (Column 8, lines 24-28) in order to obtain the desired product.

Response to Arguments

4. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection as applicant amended the claims.

Rebuttal to applicant's arguments of inherency:

The examiner respectfully disagrees with applicant's argument regarding the use of inherency for rejecting some of the claims (in particular claims 4-6.) While not arguing applicant's position of the requirements for a particular limitation to be an inherent feature, the examiner maintains that "moisture content" is an inherent feature to the prior art of record. For example, the moisture content could be zero or it could be one hundred percent. Moisture content is a measurable feature common to objects, just as length, mass, volume, etc. are regardless of the amount. While noting that the particular limitation of the percent of the moisture content claimed (less than 2 weight %, per claim 4) is not an inherent feature, the limitation that the prior art of record has a moisture content is an inherent feature.

Rebuttal of incorporation of the Lelli and Rockrath (cited above) reference:

While applicant states that they are unaware of any disclosure, teaching or suggestion by the Lelli reference of applying a polymer to an interlocking unit, the examiner respectfully cites column 1, lines 15-30 of Lelli which note that this feature has common use in the construction industry

Art Unit: 3635

including with wood products, and the examiner argues that interlocking parts of wood members is well known in the art.

Further, while Rockrath does not disclose the use of the coating of such products as claimed, however, it was used in the rejection of claim 12, above, to note that adding etherified amino resins are known in the art in polymeric compositions (Rockrath: col. 8, lines 25-35) which are used in coating processes.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William V. Gilbert whose telephone number is 571.272.9055. The examiner can normally be reached on Monday - Friday, 08:00 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571.272.6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/W. V. G./
Examiner, Art Unit 3635

/Basil Katcheves/
Primary Examiner, Art Unit 3635